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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/440,645	11/16/1999	AVERY FONG	5244-0109-2	3214

22850 7590 03/10/2005	EXAMINER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.	PARTON, KEVIN S

1940 DUKE STREET	ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314	2153	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/440,645	FONG ET AL.
	Examiner	Art Unit	
	Kevin Parton	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-36* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-36* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>07/23</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's request for reconsideration of the finality of the rejection of the last

Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2.   Applicant's arguments with respect to claims 1, 10, 19, and 28 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 2, 5, 7, 10, 11, 14, 16, 19, 20, 23, 25, 28, 29, 32, and 34 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (USPN 6,643,696) in

view of Middleton, III et al. (USPN 6,393,407) and Hensley et al. (USPN 5,333,302).

5.   Regarding claims 1, 10, 19, and 28 Davis et al. (USPN 6,643,696) teaches a

system comprising:

   a. An interface of a target application in a device, the interface comprising

      a plurality of operations to be selected by a user (column 8, lines 51-

      54). Note that the interface is the web page.

   b. A monitoring unit configured to monitor data of selecting of the plurality

      of operations of the interface by the user, the monitored data being in a

form of a map mapping key data in a key portion of the map to

respective value data in a corresponding value data portion (column 8,

lines 51-59; column 9, lines 3-9; column 11, lines 49-51). Note that the

use of a database for storage inherently requires mapping a key data

to a value data for all data.

c. A communicating unit configured to receive the monitored data, and to

communicate the monitored data (column 9, lines 51-53).

d. Wherein the monitoring unit and communicating unit are self-contained

in the device and wherein the monitoring unit is configured to generate

the monitored data without any initial external communication

connection by the communicating unit (abstract; column 9, lines 16-20,

51-53). Note that the abstract points out that the tracking program may

come from a different server and the specification points out that it may

be loaded onto the client and require no download. Further note that

the monitoring and communication can be done on a site stored in the

cache.

Although the system disclosed by Davis et al. (USPN 6,643,696) shows

substantial features of the claimed invention, it fails to disclose specifically means for

creating a log of the monitored information at the monitored device for later

communication. The reference of Davis et al. (USPN 6,643,696) immediately sends

information to a database as it is collected. Further, it fails to teach means wherein the

target application is self-contained in the device prior to any initial external

communication connection by the communication unit.

Nonetheless, these features are well known in the art and it would have been an

obvious modification of the system disclosed by Davis et al. (USPN 6,643,696), as

evidenced by Middleton, III et al. (USPN 6,393,407) and Hensley et al. (USPN

5,333,302).

In an analogous art, Middleton, III et al. (USPN 6,393,407) discloses a system for

monitoring user input to an interface with means for creating a log of the monitored

information at the monitored device for later communication (column 5, lines 2-4, 37-40,

46-53).

Given the teaching of Middleton, III et al. (USPN 6,393,407), a person having

ordinary skill in the art would have readily recognized the desirability and advantages of

modifying Davis et al. (USPN 6,643,696) by employing a local log of the monitored data

that is subsequently communicated. This benefits the system by allowing the

monitoring to continue and data to be stored even when the machine is not connected

to the network, such as viewing a cached page.

Further, in an analogous art, Hensley et al. (USPN 5,333,302) teach a system for

monitoring user input wherein the target application is self-contained in the device prior

to any initial external communication connection by the communication unit (column 1,

lines 15-19; column 2, lines 46-59; column 6, lines 40-49).

Given the teaching of Hensley et al. (USPN 5,333,302), a person having ordinary

skill in the art would have readily recognized the desirability and advantages of

modifying the system of Davis by having the target application self-contained in the

device. This benefits the system by allowing for monitoring the usage of a locally stored

application that may be pre-loaded on the monitored device for user-friendliness as

pointed out in Hensley et al. (USPN 5,333,302) (column 1, lines 16-19).

6.   Regarding claims 2, 11, 20, and 29, Davis et al. (USPN 6,643,696) teach all the

limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach

means wherein the target application is a software application and the interface is a

display screen of the software application (column 8, lines 51-54).

7.   Regarding claims 5, 14, 23, and 32, although the system disclosed by Davis et

al. (USPN 6,643,696) (as applied to claims 1, 10, 19, and 28, respectively) shows

substantial features of the claimed invention, it fails to disclose means wherein the

communicating unit sends the log of the monitored data when the user exits the target

application.

Nonetheless, these features are well known in the art and it would have been an

obvious modification of the system disclosed by Davis et al. (USPN 6,643,696), as

evidenced by Middleton, III et al. (USPN 6,393,407).

In an analogous art, Middleton, III et al. (USPN 6,393,407) discloses a system for

monitoring user input to an interface wherein the communicating unit sends the log of

the monitored data when the user exits the target application (column 5, lines 47-53).

Given the teaching of Middleton, III et al. (USPN 6,393,407), a person having

ordinary skill in the art would have readily recognized the desirability and advantages of

modifying Davis et al. (USPN 6,643,696) by employing the sending of a log when a user

exits a target application. This benefits the system by decreasing network traffic created by the monitoring program.

8.   Regarding claims 7, 16, 25, and 34, Davis et al. (USPN 6,643,696) teach all the limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach means wherein the key data and the value data in the map both contain string data (column 8, lines 54-59). Note that the information would include string data such as what is being selected.

9.   Claims 8, 17, 26, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (USPN 6,643,696), Middleton, III et.al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302) as applied to claims 1, 10, 19, and 28 above, and further in view of Fujiyama et al. (USPN 6,336,141).

10.   Regarding claims 8, 17, 26, and 35, Davis et al. (USPN 6,643,696), Middleton, and Hensley et al. (USPN 5,333,302) teach all the limitations as applied to claims 1, 10, 19, and 28, respectively. They further teach means wherein the value data portion includes vectors that contain string data (column 8, lines 50-59). Note that certain monitoring values would have multiple values for one session.

Although the system disclosed by Davis, Middleton, and Hensley et al. (USPN 5,333,302) shows substantial features of the claimed invention, it fails to disclose specifically that plural vectors are used wherein each vector contains an array of string data.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Davis, Middleton, III et al. (USPN

6,393,407), and Hensley et al. (USPN 5,333,302), as evidenced by Fujiyama et al.

(USPN 6,336,141).

In an analogous art, Fujiyama et al. (USPN 6,336,141) disclose a system for

storing network element monitored data in a log. In the log, there are plural vectors

each of which corresponds to an array of string data (figure 9; figure 12). Note that in

the reference, each column of the log would be an array of string data with some null

values.

Given the teaching of Fujiyama et al. (USPN 6,336,141), a person having

ordinary skill in the art would have readily recognized the desirability and advantages of

modifying Davis, Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN

5,333,302) by employing the use of plural vectors in the log (map structure) to store the

data. This benefits the system by making the data easier to store and read. Note that

any type of map structure that maps key data to their data types would work.

11.   Claims 3, 6, 12, 15, 21, 24, 30, and 33 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Davis et al. (USPN 6,643,696), Middleton, and Hensley et al.

(USPN 5,333,302) as applied to claims 1, 10, 19, and 28, respectively above, and

further in view of Motoyama (USPN 5,887,216).

12.   Regarding claims 3, 4, 12, 13, 21, 22, and 30, and 31, Davis et al. (USPN

6,643,696), Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302)

teach all of the limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Davis et al. (USPN 6,643,696), Middleton, III et

al. (USPN 6,393,407) and Hensley et al. (USPN 5,333,302) shows substantial features

of the claimed invention, it fails to disclose means wherein the target application is an

image forming device and the interface is an operation panel of the image forming

device.

Nonetheless, these features are well known in the art and would have been an

obvious modification of the system disclosed by Davis et al. (USPN 6,643,696),

Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302), as

evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for

communicating user configuration of an image forming device wherein the target

application is an image forming device and the interface is an operation panel of the

image forming device (figure 1; figure 5).

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary

skill in the art would have readily recognized the desirability and advantages of

modifying Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN 6,393,407), and

Hensley et al. (USPN 5,333,302) by employing the concept of usage monitoring on the

image forming device. Image forming devices are often located remotely from their

manufacturers and maintenance contractors. By monitoring usage and errors, the

contractors can more quickly and accurately diagnose and remedy problems with the

machine benefiting the client and the contractor.

13.   Regarding claims 4, 13, 22, and 31, Davis et al. (USPN 6,643,696), Middleton, III

et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302) teach all of the

limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302) shows substantial features of the claimed invention, it fails to disclose means wherein the target application is an appliance and the interface is an operation panel of the appliance.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302), as evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for communicating user configuration of an image-forming device wherein the target application is an appliance and the interface is an operation panel of the appliance. (figure 1; figure 5). Note that the term "appliance" is vague and is taken here to be any type of equipment with a user interface and a business or household application.

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302) by employing the concept of usage monitoring on the image forming device. Image forming devices are often located remotely from their manufacturers and maintenance contractors. By monitoring usage and errors, the contractors can more quickly and accurately diagnose and remedy problems with the machine benefiting the client and the contractor.

14.   Regarding claims 6, 15, 24, and 33, Davis et al. (USPN 6,643,696), Middleton, III

et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302) teach all of the

limitations as applied to claims, 1, 10, 19, and 28, respectively.

Although the system disclosed by Davis et al. (USPN 6,643,696), Middleton, III et

al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302) shows substantial features

of the claimed invention, it fails to disclose means comprising a setting unit configured

to set a number of sessions of the target application to be executed by the user prior to

the communicating unit communicating the log of the monitored data.

Nonetheless, these features are well known in the art and would have been an

obvious modification of the system disclosed by Davis et al. (USPN 6,643,696),

Middleton, III et al. (USPN 6,393,407), and Hensley et al. (USPN 5,333,302), as

evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for

communicating user configuration to a central server comprising a setting unit

configured to set a number of sessions of the target application to be executed by the

user prior to the communicating unit communicating the log of the monitored data

(figure 12). Note that in the reference, analyzing the settings leads to communication

with the server.

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary

skill in the art would have readily recognized the desirability and advantages of

modifying Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN 6,393,407), and

Hensley et al. (USPN 5,333,302) by employing the use of a variable to note how many

times an action occurs before sending data. This benefits the system because during

slow use periods, wasted communications can be avoided to reduce traffic and

processor load.

15.   Claims 9, 18, 27, and 36 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN

6,393,407), Hensley et al. (USPN 5,333,302), and Fujiyama et al. (USPN 6,336,141) as

applied to claims 8, 17, 26, and 35 above, and further in view of Motoyama (USPN

5,887,216).

16.   Regarding claims 9, 18, 27, and 36, Davis et al. (USPN 6,643,696), Middleton, III

et al. (USPN 6,393,407), Hensley et al. (USPN 5,333,302), and Fujiyama et al. (USPN

6,336,141) teach all of the limitations as applied to claims 8, 17, 26, and 35,

respectively.

Although the system disclosed by Davis et al. (USPN 6,643,696), Middleton, III et

al. (USPN 6,393,407), Hensley et al. (USPN 5,333,302), and Fujiyama et al. (USPN

6,336,141) shows substantial features of the claimed invention, it fails to disclose

means wherein the communicating unit communicates the log of the monitored data by

Internet mail.

Nonetheless, these features are well known in the art and would have been an

obvious modification of the system disclosed by Davis et al. (USPN 6,643,696),

Middleton, III et al. (USPN 6,393,407), Hensley et al. (USPN 5,333,302), and Fujiyama

et al. (USPN 6,336,141), as evidenced by Motoyama (USPN 5,887,216).

In an analogous art, Motoyama (USPN 5,887,216) discloses a system for communicating user configuration to a central server comprising means wherein the communicating unit communicates the log of the monitored data by Internet mail (column 4, lines 39-42).

Given the teaching of Motoyama (USPN 5,887,216), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Davis et al. (USPN 6,643,696), Middleton, III et al. (USPN 6,393,407), Hensley, and Fujiyama et al. (USPN 6,336,141) by employing the use of the Internet for communication back to the central server. This allows the system to be monitored by entities outside the operating network and for increased security in the transmission of the log files. The central server can reside at a contractor facility and allow for maintenance from that location rather than an on-site visit.

Conclusion

17.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

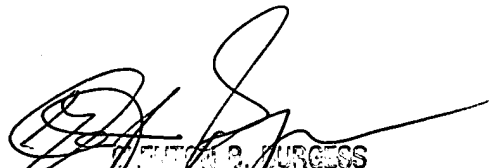than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kevin Parton whose telephone number is (571)272-

3958. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton
Examiner
Art Unit 2153

ksp